# What is COSPAR and why does it matter to PSS?

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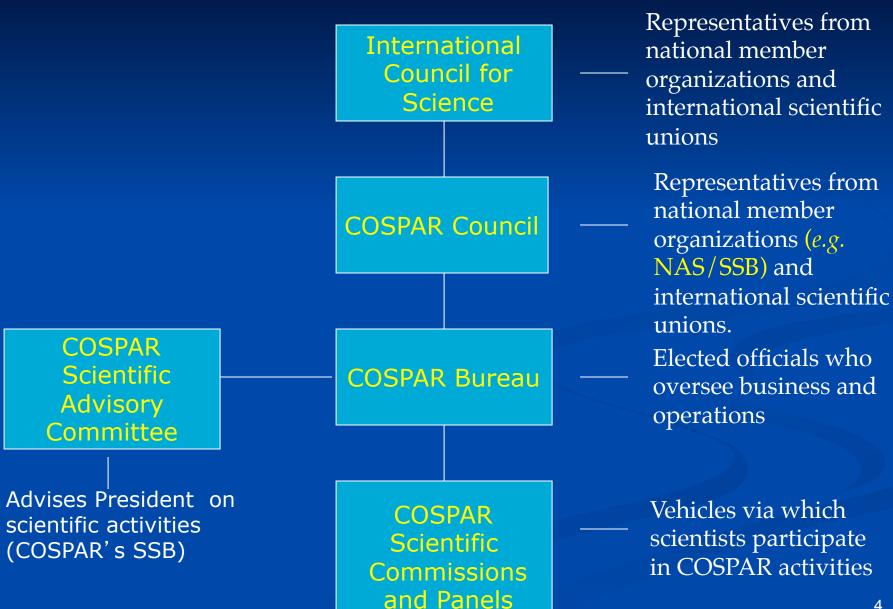
# Topics

- Overview of COSPAR
- Relevance to PSS
- How to engage in an effective way

# Overview of COSPAR

- Origin: Established by the International Council for Science (ICSU) in 1958 as an outgrowth of the International Geophysical Year and the launch of Sputnik 1.
- Goals: To promote international scientific research in space, with emphasis on the exchange of results, information and opinions, and to provide a forum, open to all scientists, for the discussion of problems that may affect scientific space research.
- Mechanisms: COSPAR addresses its goals by sponsoring scientific assemblies, symposia, etc.

#### **COSPAR Governance**



#### **COSPAR** and the SSB

- The SSB is the U.S. National Committee for COSPAR
- NRC appoints U.S. Representative to COSPAR based on SSB nomination
- U.S. Representative was automatically one of COSPAR two vice presidents (second vice president appointed by the Soviet Academy of Sciences) until democracy won the day in 1994. Since then, the U.S. Representative position has been held by:
  - Louis J. Lanzerotti (1994-2002)
  - Edward C. Stone (2002-2010)
  - Robert P. Lin (2010-2012)
  - Len Fisk (2012-2014, elected President of COSPAR in 2014)
  - Charlie Kennel (2014 )

#### What Does COSPAR Do?

#### Well Known

- Holds the biennial Scientific
  Assembly. 4,000+ abstracts received
  in all space-science disciplines. 30+
  parallel sessions over a 7-day period,
  plus interdisciplinary lectures and
  other plenary presentations.
- Publishes *Advances in Space Research,* a peer-reviewed journal which accepts papers in all space-science disciplines.
- Publishes *Space Research Today,* a quarterly newsletter.

#### Less Well Known

 COSPAR "develops, maintains and promulgates" the world's Planetary Protection Policy

#### **COSPAR Scientific Structure**

- SC A—Space Studies of the Earth's Surface, Meteorology and Climate
- SC B—Space Studies of the Earth-Moon System, Planets, and Small Bodies
- SC C—Space Studies on the Upper Atmospheres of the Earth and Planets including Reference Atmospheres
- SC D—Space Plasmas in the Solar System, Including Magnetosphere
- SC E—Astrophysics from Space
- SC F—Life Sciences as Related to Space [home to astrobiology]
- SC G—Materials Sciences in Space
- SC H—Fundamental Physics in Space

Yellow font denotes areas of particular relevance to PSS

Plus 11 special purpose panels devoted to, e.g., Capacity Building, Space Weather, Planetary Protection, and Exploration

#### **COSPAR Scientific Assemblies**

- Ist—London, U.K., 1958
- 5<sup>th</sup>—Washington, D.C. USA, 1962
- 14<sup>th</sup>—Seattle, WA, USA, 1971
- 19<sup>th</sup>—Philadelphia, PA, USA, 1976
- 29<sup>th</sup>—Washington, D.C., USA, 1992
- 32<sup>nd</sup>—Nagoya, Japan, 1998
- 34<sup>th</sup>—Houston, USA, 2002
- 35<sup>th</sup>—Paris, France, 2004
- 36<sup>th</sup>—Beijing, China, 2006
- 37<sup>th</sup>—Montreal, Canada, 2008
- 38<sup>th</sup>—Bremen, Germany, 2010
- 39<sup>th</sup>—Mysore, India, 2012
- 40<sup>th</sup>—Moscow, Russia, 2-8 August 2014
- 41<sup>st</sup>—Istanbul, Turkey, 2016
- 42<sup>nd</sup>—Pasadena, CA, USA, 2018





### Relevance to PSS

- 1. Planetary Protection Policy
- 2. Extensive international scientific engagement

# **Background on Planetary Protection (1)**

Terms of Reference (https://cosparhq.cnes.fr/scientific-structure/ppp):

"The Panel is concerned with biological interchange in the conduct of solar system exploration, including: (1) possible effects of contamination of planets other than the Earth, and of planetary satellites within the solar system by terrestrial organisms; and (2) contamination of the Earth by materials returned from outer space carrying potential extraterrestrial organisms. The primary objectives of the Panel within COSPAR are to develop, maintain, and promulgate planetary protection knowledge, policy, and plans to prevent the harmful effects of such contamination, and through symposia, workshops, and topical meetings at COSPAR Assemblies to provide an international forum for exchange of information in this area...."

# **Background on Planetary Protection (2)**

- Current PPP leadership:
  - Chair: G. Kminek (ESA/ESTEC), 2014-2018
  - Vice-Chairs:
    - C. Conley (USA), 2014-2018\*
    - V. Hipkin (Canada), 2014-2018\*
    - H. Yano (Japan), 2014-2018
  - The COSPAR Bureau appoints the panel leaders to four-year terms
  - All four current leaders' terms expire in 2018. Two are termlimited (denoted by [\*] above)

# **Background on Planetary Protection (3)**

- The current PPP Policy was adopted in 2011 (see https://cosparhq.cnes.fr/sites/default/files/pppolicy.pdf)
  - It was last updated in 2009 (*J. Rummel, pers. comm., 2015*)
  - Updates will likely be proposed at the Istanbul 2016 Assembly
    - Proposed updates will be based on presentations to be made in Istanbul, and the recent PP Workshop in Bern
    - The PP Business Meeting at each Assembly is the forum at which proposed updates are discussed
  - The Pasadena 2018 Assembly offers further opportunity for updates. The Istanbul Assembly provides a key "launch pad"

# How to engage in an effective way

- Attend and participate in the 2016 Assembly!
  - 30 July 7 August, Istanbul
  - Call for papers is open until 12 Feb 2016
  - See for details: <a href="https://www.cospar-assembly.org">https://www.cospar-assembly.org</a>
- Attend and participate in the business meetings of the PPP and Commissions B (planetary) and F (astrobiology)
  - This is where the slate of candidate officers is created for COSPAR Bureau consideration.
  - It is where issues related to changes in the COSPAR PP Policy are raised, debated, and if warranted, where updates to the Policy are prepared for consideration by the COSPAR Bureau.

#### In Conclusion

- 1. By engaging with the PPP (Planetary Protection Panel), you can influence important updates to the Policy.
- 2. In general, attending, presenting and engaging at the biennial Scientific Assemblies is rewarding scientifically, and offers opportunities beyond those of AGU and EGU for expanded collaboration with international colleagues.

# Thank You